

**APPROVE ENTERING INTO AGREEMENTS WITH VARIOUS CONSULTANTS FOR DEVELOPMENT
OF A CAPSTONE COURSE IN SPACE SCIENCE**

THE CHIEF EXECUTIVE OFFICER REPORTS THE FOLLOWING DECISION:

Approve entering into agreements with various Consultants to provide development and implementation of a new elective Capstone Course in Space Science for the Chicago Public Schools-Office of Teaching & Learning at a cost not to exceed \$1,400,000.00 in the aggregate. Consultants were selected on a non-competitive basis due to the unique knowledge requirements of the participants as defined in the National Aeronautics and Space Administration (NASA) Request for Proposal. Written agreements for each Consultant's services are currently need to be negotiated. No services shall be provided and no payment shall be made to any Consultant prior to the execution of such Consultant's written agreement. The authority granted herein shall automatically rescind as to each Consultant in the event the written agreement for such Consultant is not executed within 90 days of the date of this Board Report. Information pertinent to these agreements is stated below.

CONSULTANTS:

- | | |
|--|---|
| 1. Loyola University Chicago – Type 1
6525 N. Sheridan Rd.
Chicago, Illinois 60626
Contact: David Slavsky
Phone #: 773-508-8352
Vendor #: 14852 | 2. Northwestern University – Type 1
Office of Sponsored Research
633 Clark Street
Evanston, Illinois 60208
Contact: Susan Ross
Phone #: 847-491-3003
Vendor #: 49090 |
| 3. Adler Planetarium & Astronomy Museum – Type 1
1300 S. Lake Shore Dr.
Chicago, Illinois 60605
Contact: Karen Carney
Phone #: 312-322-0516
Vendor #: 22637 | 4. DePaul University – Type 1
Office of Sponsored Programs & Research
1 E. Jackson Blvd.
Chicago, Illinois 60604
Contact: Mr. Robert McCarthy
Phone #: 312-362-5409
Vendor #: 37159 |
| 5. University of Chicago/CIUP – Type 1
5801 S. Ellis Ave.
Chicago, Illinois 60637
Contact: Don York
Phone #: 773-702-5852
Vendor #: 33123 | 6. Indiana University – Type 2
Trustees of Indiana University
P.O. Box 1847
Bloomington, Indiana 47402-1847
Contact: Adam Maltese
Phone #: (812) 606-1829
Vendor #: 91554 |

USER:

Office of Teaching & Learning
Chicago Public Schools
125 S. Clark Street, 16th Fl
Contacts: Michael Lach (773-553-3386)
John F. Loehr (773-553-6384)

TERM: The term of each agreement shall commence on the date the agreement is signed and shall end on April 8, 2011. Each agreement shall have one (1) option to renew for a period of eighteen (18) months; provided that funds remain available from the NASA grant (NNX09AH88A) that is being used to support this work.

EARLY TERMINATION RIGHT: The Board shall have the right to terminate each agreement with 30 days written notice.

SCOPE OF SERVICES:

Consultants shall provide professional services to the Board to implement the Chicago Public Schools Capstone Course in Space Science. The professional services will focus on the creation of a new elective science course that teaches students about space science using educational materials and scientific data that is made publicly available by the NASA. In addition, this course will be built around the Instructional Development Systems (IDSs) of the High School Transformation project principals of student inquiry, project based learning, and teacher support. This approach will insure that the newly created course is aligned with the instructional pedagogy and content of other curriculum efforts within CPS.

Consultants will be providing one of two (2) types of intensive, ongoing 3rd party help. **Type 1 Consultants provide services for Course Development and Implementation**, while the **Type 2 Consultant will provide services for Program Evaluation**. The following section summarizes the scope of service for each type:

Each **Type 1 Consultant** will be responsible for the development and implementation of one unit of instruction centered on a NASA mission or program for the Capstone Course in Space Science. Each Type 1 Consultant will be held accountable for implementing the following scope of work in close coordination with CPS:

- **Create and run intensive summer workshops:** Each Type 1 Consultant will create and run an intensive, 120 hour, summer workshop for up to 4 high school teachers and 16 high school students centered on their chosen NASA mission/program. This workshop will not only offer the participants an opportunity to learn about the specific NASA mission/program but also will provide the opportunity to engage in research projects using authentic NASA data collected by that mission/program. In addition, each workshop will serve as the foundation for development of an instructional unit which will become part of the coherent Capstone Course.
- **Development of a coherent Capstone Course in Space Science:** The Type 1 Consultant will work with CPS and the other Type 1 Consultants to design a coherent Capstone Course in Space Science based on their experiences during the intensive summer workshops.
 - **Course planning infrastructure:** The Type 1 Consultant will create planning guides that provide appropriate lesson structure with annotation to support best-practice instruction, including instructional materials and equipment; the planning guides should “tell the story” of each unit and drive an effective balance of content coverage, deep cognitive skill development, and independent student inquiry.
 - **Assessments dedicated to the course:** The Type 1 Consultant is responsible for assessments that carefully check for course-level skills and content, summative pre-test, semester, and final exams, as well as unit tests designed to help guide instruction and course planning.
 - **Concrete professional development:** During the implementation phase of the Capstone Course in Space Science, each Type 1 Consultant will participate in the design and delivery of 60 hours of professional development (30 hours during the summer, 30 hours throughout the school year) for the teachers of this course. This professional development will be specific and dedicated to concrete course requirements and issues. Sessions and workshops should serve concrete “next week, next month” needs for teachers.
- **Networking opportunities:** The Type 1 Consultant will work with CPS and the other Type 1 Consultants to build teacher networks that thrive within schools, online and across schools offering the Capstone Course in Space Science, to build effective connections, develop an exciting professional environment for teachers, and broker the dissemination of best-practice instruction.

Each **Type 2 Consultant** will be responsible for the development and implementation of a scientifically sound

and valid program evaluation. This program evaluation will provide ongoing formative evaluation tools for use by CPS leadership and the Type 1 Consultants as they implement and refine their programs, as well as establish a strategy and process for appropriate long-term summative evaluation of the effects the Capstone Course in Space Science on both students and teachers. The formative work should be ongoing and fluid, providing processes for results with CPS leadership and the Type 1 Consultants so they can revisit and adjust specific curriculum, model lessons, and professional development to maximize the potential of the work. Whenever possible, this evaluation will maximize the use of extant data (e.g., lesson plans and syllabi) to minimize respondent burden. Each Type 2 Consultant will be held accountable for implementing the following scope of work in close coordination with CPS:

- **Key stakeholder interviews:** Each Type 2 Consultant at three points in time during the project (beginning Year One, end Year One, end Year Two) will conduct interviews with key stakeholders to provide data related to the intended program and its implementation, as well as perceived program impact.
- **Web-based surveys:** Each Type 2 Consultant will be responsible for developing and administering web-based surveys of both teachers and students at the beginning and end of each project year to collect data related to the key project objectives and performance measures. The student survey will include items related to student attitudes/interest in Science, Technology, Engineering, and Mathematics (STEM), self-reported grades/academic performance, previous participation in STEM activities and courses, intended college major, and perceived program impact. Teacher surveys will include perceptions of student performance and interest/attitudes, self-reported impact on teacher content knowledge, and items related to teacher awareness of NASA resources.
- **Site Visits:** Each Type 2 Consultant will conduct two site visits of 3 days duration each year to visit program sites including, but not limited to, summer workshop locations and participating schools. Site visits may include observations of the intensive workshops and student science fair, interviews and/or focus groups with students and teachers, and the collection of extant data and documents.
- **Reporting Structure:** Each Type 2 Consultant will develop a reporting structure that provides CPS leadership and the Type 1 Consultants with timely formative data to make necessary program improvements. In addition, the Type 2 Consultant will produce for CPS leadership and the Type 1 Consultants an annual report that collects and summarizes all evaluation findings.

DELIVERABLES: Consultants will provide support and expertise to create a new elective science course, the Capstone Course in Space Science, for CPS. This course will teach students about space science using educational materials and scientific data that is made publicly available by the National Aeronautics and Space Administration (NASA). Each **Type 1** Consultant shall be responsible for all aspects of development and implementation of the Capstone Course in Space Science, including, as applicable, curriculum development, assessment development, teacher professional development, and facilitation of professional learning and teacher networks within and among schools. To that end, each **Type 1** Consultant will provide the following deliverables:

- Two intensive 120 hour workshops conducted in the summer for teachers and students centered around a NASA mission or program as outlined in the NASA GK-12 grant submission;
- An alignment matrix for the course that identifies the Illinois Learning Standards (ILS) and the College Readiness Standards (CRS) addressed throughout the year with the unit in which this will occur;
- A Course Planning Guide that provides a course overview, a weekly assessment guide, course goals and learning targets, and a teacher guide;
- A model lesson for each unit that corresponds to the NASA mission or program that is addressed by the unit;
- One formative assessment for each unit and 6 summative assessments to be used at the end of each unit as well as at the end of the course;

- A professional development plan that outlines how teachers will be prepared to teach the course during a 30 hour summer workshop as well as how teachers will be supported with 30 hours of professional development throughout the year; and,
- Professional development materials (e.g. workshop agendas, slides, handouts, evaluations) for the 30 hour summer workshop and the 30 hours of professional development provided during the school year at dates to be agreed upon by CPS and the Type 1 Consultants.

Each **Type 2** Consultant will provide the following deliverables:

- An overall evaluation plan for the project;
- A web survey for teacher participants and a web survey for student participants;
- An interview and observation protocol for site visits; and,
- Formative and summative reports of data.

OUTCOMES: The Consultants' services outlined in this report will produce a new science elective course focused on space science and built around publicly available NASA educational materials and data, which can be included in the course catalog of all of the high schools within CPS. This course should produce marked increases in fourth year science enrollment as well as increased instructional rigor and student engagement in those fourth year science electives. In addition, it is expected that data analyze and student inquiry design of this course will cause more students to participate in the CPS Student Science Fair; thereby, making themselves eligible for scholarship opportunities. Ultimately, success in this effort will be defined primarily by improvements in student achievement and attainment, as well as improvements in post-secondary outcomes for students and the professional school climate for teachers.

COMPENSATION: Consultants shall be paid in accordance with the unit prices contained in their agreement; not to exceed the sum of \$1,400,000.00 in the aggregate.

AUTHORIZATION: Authorize the General Counsel to include other relevant terms and conditions in the written agreements. Authorize the President and Secretary to execute the agreements. Authorize the Chief Education Officer to execute all ancillary documents required to administer or effectuate these agreements.

AFFIRMATIVE ACTION: The M/WBE participation goals for the contract include: 26% total MBE and 5% total WBE.

Pursuant to Section 5.2 of the Remedial Program for Minority and Women Business Enterprise Participation in Goods and Services Contracts, the following consultants are exempt from review because the entities are not-for-profit organizations or universities:

- 1) Loyola University Chicago - Type 1
- 2) Northwestern University - Type 1
- 3) Adler Planetarium & Astronomy Museum – Type 1
- 4) DePaul University – Type 1
- 5) University of Chicago – Type 1
- 6) Indiana University – Type 2

LSC REVIEW: Local School Council approval is not applicable to this report

FINANCIAL: Total amount not to exceed \$1,400,000.00 in the aggregate. The total cost of the developed system of support will be funded through a NASA grant (NNX09AH88A).

Charge to: Budget Classification #: 13732-326-54125-221648-541201

GENERAL CONDITIONS:

Inspector General – Each party to the agreement shall acknowledge that, in accordance with 105 ILCS 5/34-

13.1, the Inspector General of the Chicago Board of Education has the authority to conduct certain investigations and that the Inspector General shall have access to all information and personnel necessary to conduct those investigations.

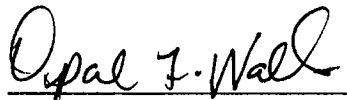
Conflicts – The agreement shall not be legally binding on the Board if entered into in violation of the provisions of 105 ILCS 5/34-21.3 which restricts the employment of, or the letting of contracts to, former Board member during the one year period following expiration or other termination of their terms of office.

Indebtedness – The Board's Indebtedness Policy adopted June 26, 1996 (96-0626-PO3), as amended from time to time, shall be incorporated into and made a part of the agreement.

Ethics – The Board's Ethics Code adopted June 23, 2004 (04-0623-PO4), as amended from time to time, shall be incorporated into and made a part of the agreement.

Contingent Liability – The agreement shall contain the clause that any expenditure beyond the current fiscal year is deemed a contingent liability, subject to appropriation in the subsequent fiscal year budget(s).

Approved for Consideration:



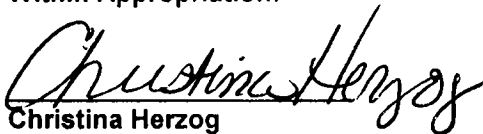
Opal L. Walls
Chief Purchasing Officer

Approved:



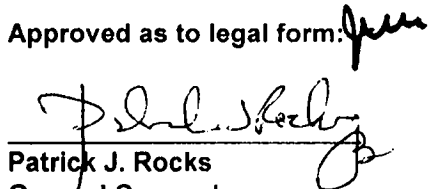
Ron Huberman
Chief Executive Officer

Within Appropriation:



Christina Herzog
Acting Chief Financial Officer

Approved as to legal form:



Patrick J. Rocks
General Counsel